APPLICATION FOR PATENT

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Title: EDUCATIONAL HIDE AND SEEK GAME

FIELD AND BACKGROUND OF THE INVENTION

5   The present invention relates to enhanced hide-and-seek games, and, more specifically, to a hide-and-seek game serving as an educational and developmental aid, and a method of use thereof.

The game of hide and seek is very well known, and has been played by most people. The standard game of hide and seek requires two or more
10   participants with one participant being the seeker and the other participant(s) hiding from the seeker. Typically, the seeker will close her eyes to give the other participants a chance to hide. Once the allotted time has gone by for the others to hide, the seeker begins to seek out the other participants. When the seeker is able to find and touch another participant, that participant becomes
15   the next seeker and the game is repeated. There are numerous variations of the standard game where rules are made to increase or decrease the difficulty of play. In one such variation on the standard hide and seek game, a person (often a parent or older sibling) hides an object, such as a doll, stuffed animal or toy, so that another person (i.e., a child) can try to find the object.
20   Typically, the person who hides the object will watch the person seeking the object and give clues as to the location of the hidden object, usually in

reference relative to the seeker's position and often in the vague form of whether the seeker is cold, warm or hot. Based on the clues, the seeking participant uses his or her logic skills to determine the location of the object.

Various inventions have attempted to give the game a more entertaining dimension, to hide objects, and to identify hidden objects. The development of radio electronics, which can serve a variety of functions, has made its use attractive to toy and game designers. U. S. Patent No. 4,496,149 to Schwartzberg, which is incorporated by reference for all purposes as if fully set forth herein, describes a container capable of emitting a repetitive radio signal of controllable volume and repetition rate. The participants in the game attempt to locate the container, in response to the emitted signals, and the first participant to locate the container has access to a prize stored in the container. Although this prior art may have a higher entertainment value than the simple, old-fashioned game of hide-and-seek, it is of little educational benefit to the participants.

A number of modern variations of the game of hide and seek have been developed and/or patented to incorporate modern electronic technology into devices to be used to play the game. One such game is "Hide 'n Sneak", which utilizes a seeker unit and one or more "hider" units that are worn by the person seeking and the person hiding, respectively. When the seeker comes within a preset distance of the hider, the seeker unit picks up a signal transmitted by the hider unit to let the seeker know that she is close to a hiding person. As the seeker gets closer to the hiding person, the seeker unit uses a variety of

lights and/or sounds to indicate the relative closeness to the person hiding. As such, the game basically replaces visual seeking with sonar-type seeking. Another game is called "Hide 'n Squeak" by Milton Bradley. In this game, an object such as a kitten or puppy with a transmitter inside is hidden. The object

5   transmits a "cute" sound every few seconds for the child to follow. Skill level is adjusted by setting how often the object transmits the sound. Other than listening for the sound of the object, there is no other interaction between the seeker and the object. Another available game utilizes the Freddie Fish® character in a toy format, treasures for hiding, and a tracking device. The

10   character toy emits different phrases to guide the seekers to the hidden treasures. Other than listening to the phrases emitted by the toy, no other interaction takes place between the child and the toy. One common aspect of the above-mentioned games is that the interaction between the seeker and the hidden objects is generally very minimal and the seeker merely has to follow

15   the sound of the devices to determine where they are located.

One approach providing an educational improvement over the more conventional hide-and-seek games is disclosed by U. S. Patent Application No. 2002/0014742 to Conte, et al. A participant in the game searches for a hidden object having a transmitter device inside or attached to the object. The

20   game participant uses a seeker unit that determines the distance between the object and the participant before and after the participant's moves. The seeker unit uses that information to determine whether the participant is moving closer or to or farther from the object and then communicates the useful

information to the game participant to assist the participant in finding the object. The participant interacts with the seeker unit to use and develop distance judging skills in searching for the hidden object. This prior art, however, falls short of educating a child about various intrinsic properties of

5   objects. Specifically, associative skills are not developed or enhanced.

Similarly, U. S. Patent No. 6,311,982 to Lebensfeld discloses a game system that includes a hidden object and a portable radio receiver carried by a player. The receiver is equipped with an analyzer system capable of informing the player of change in the distance between the receiver and the hidden

10   object, and, optionally, the preprogrammed identity of the hidden object.

U. S. Patent No. 6,364,315 to Velke describes an elaborate game system having animal-shaped game pieces equipped with radio transmitters or radio emitters, as well as light-emitting devices and sound-emitting devices. A participant is provided with a transmitter that activates the receivers when the

15   participant enters a pre-programmed detection zone around each of the receivers, causing the light-emitting device to emit light and the sound-emitting device to produce a croaking sound. The game system has a multitude of scenarios, loosely based on interactions between a frog and other objects.   While the croaking sound of a frog may be construed as an

20   associative sound, it must be emphasized that the croaking sound is used analogously to the light-emitting device, which is decidedly non-associative in nature.   The developmental and educational dimensions provided by object association are not the motivation, nor the goal, of the various games, nor do

any of the games disclosed by U. S. Patent No. 6,364,315 realize these educational objectives. In the most closely related game disclosed therein, involving the location of frog-shaped game pieces, the potential for object association is minimal, because the opportunity for the player to make the

5   association comes only after the location of the frog-shaped game piece. Moreover, it is manifestly evident that the game is designed for older children, who already associate the sounds of an animal and the animal (or a representation thereof) with facility, and for whom the croaking sound is but an entertaining variation of a buzzer, flashing light, or other demonstrably

10   non-associative emission.

Thus, although some of the game systems of the prior art help in fostering basic cognitive skills related to distance, sound identification, etc., these prior art devices lack a pedagogical aspect of learning associative, object-based properties. There is further need for, and it would be highly advantageous to

15   have, a game that would help a child or a developmentally handicapped person to actively discover and develop new cognitive and associative skills. It would be of further advantage if such a game would be entertaining, simple to play and operate, and have an immediate educational effect.

SUMMARY OF THE INVENTION

The present invention is an educational hide and seek game system for developing associative skills of a player, the game system including: (a) a plurality of objects for hiding, each of the objects having emitters, and (b) a

control unit including: (i) a control panel having a plurality of activators, each activator of the activators having an associative figure disposed on the control panel and having an association with a particular object of the objects; (ii) a signal generator for producing signals, operatively connected to the activators, and (iii) a transmission mechanism for transmitting the signals to the objects, wherein each particular one of the activators activates a corresponding one of the emitters, via the signal generator and the transmission means, so as to produce a sound associated with the associative figure.

According to one feature of the present invention, the player utilizes the associative sound to locate the object.

According to another feature of the present invention, the association is a shape association, such that the associative figure substantially matches a shape of the particular object.

According to another feature of the present invention, the sound associated with the associative figure is based on a name of the shape.

According to yet another feature of the present invention, the object is selected from the group of objects consisting of: toy animals, colors, numbers, shapes, and letters.

According to yet another feature of the present invention, the association is a color association, such that a color of the associative figure substantially matches a color of the particular object.

According to yet another feature of the present invention, the sound associated with the associative figure is based on a name of the color.

According to another feature of the present invention, the activator on the control panel is an associated figure associated with the object.

According to another feature of the present invention, the associated figure associated with the object is disposed on the activator.

According to yet another feature of the present invention, the associated figure associated with the object is disposed adjacent to the activator.

According to one feature of the present invention, the sound associated with the associative figure is a name of the object.

According to another feature of the present invention, the sound associated with the associative figure is an audible spelling of the name of the object.

According to another feature of the present invention, the sound associated with the associative figure is substantially a sound emitted by a real object represented by the object.

According to yet another feature of the present invention, the sound associated with the associative figure is an audible spelling of the name of the object.

According to yet another feature of the present invention, the sound associated with the associative figure is a spelling of a sound emitted by a real object represented by the object.

According to yet another feature of the present invention, the sound associated with the associative figure is a hint pertaining to the object.

According to a further feature of the present invention, the sound associated with the associative figure is at least part of a song pertaining to the object.

According to another aspect of the present invention, there is provided an educational hide and seek game method for developing associative skills of a player, including the steps of: (a) providing a game system including: (i) a plurality of objects for hiding, each of the objects having emitters, and (ii) a control unit including: (A) a control panel having a plurality of activators, each activator of the activators having an associative figure disposed on the control panel and having an association with a particular object of the objects; (B) a signal producer, operatively connected to the activators, and (C) a transmission mechanism for transmitting the signals to the objects, and (b) activating the element by means of the activator, so as to produce an associative sound, each particular sound associated with a particular associative figure.

According to further features in the described preferred embodiments, the method further includes utilizing the associative sound to locate the object.

According to further features in the described preferred embodiments, each object is selected from the group of objects consisting of: toy animals, colors, numbers, shapes, and letters.

According to further features in the described preferred embodiments, the method further includes (c) acquiring associative knowledge by association of the associative figure disposed on the control panel, with the associative sound.

According to further features in the described preferred embodiments, the method further includes (d) associating the associative sound and the particular object, so as to reinforce the associative knowledge.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is herein described, by way of example only, with reference to the accompanying drawings. With specific reference now to the drawings in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of the preferred embodiments of the present invention only, and are presented in the cause of providing what is believed to be the most useful and readily understood description of the principles and conceptual aspects of the invention. In this regard, no attempt is made to show structural details of the invention in more detail than is necessary for a fundamental understanding of the invention, the description taken with the drawings making apparent to those skilled in the art how the several forms of the invention may be embodied in practice.

In the drawings:

FIG. 1A is a conceptual diagram illustrating one embodiment of the game apparatus of the present invention;

FIG. 1B is a schematic diagram of a control panel of the game apparatus of FIG. 1A, wherein the panel is alternatively provided with dial stops;

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FIG. 1C is a schematic diagram illustrating another embodiment of the game apparatus of FIG. 1A, wherein the shape of a button substantially matches the shape of a hidden element;

FIG. 1D is a schematic diagram illustrating another embodiment of the

5   game apparatus of FIG. 1A, wherein a picture or a shape is disposed next to each button that corresponds to the picture or a shape; and

FIG. 2 is a conceptual diagram illustrating another embodiment of the game apparatus of the present invention, illustrating alternative button characteristics of the panel.

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DESCRIPTION OF THE PREFERRED EMBODIMENTS

The principles and operation of the system in the invention according to the present invention may be better understood with reference to the drawings and the accompanying description.

15   Before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and the arrangement of the components set forth in the following description or illustrated in the drawing. The invention is capable of other embodiments or of being practiced or carried out in various ways.

20   Also, it is to be understood that the phraseology and terminology employed herein is for the purpose of description and should not be regarded as limiting.

Referring now to the drawings, Figure 1A is a conceptual diagram illustrating one embodiment of the game apparatus of the present invention. The game consists of a control panel **10**, and six elements **31-36**, by way of example.

5   Each of elements **31-36** is battery-powered and equipped with standard circuitry commonly used in the art, such as pagers, beacons, and transponders. Each of elements **31-36** is also provided with circuitry to process incoming radio signals and to play synthesized or pre-recorded sound information, such as a sound of an object, object name, object spelling, description of object

10   name, description of object shape, and/or a song or a hint associated with the object. Each of elements **31-36** is also equipped with a system to reproduce the sound information.

Control panel **10** is a portable, battery-powered device that is configured to control elements **31-36**. Control panel **10** contains an ON-OFF switch **11**,

15   buttons **51-56**, (or, alternatively, dial stops **51-56**, with a dial or selector **13**, as shown in Figure 1B, according to another preferred embodiment), which correspond to elements **31-36**, respectively.

In another embodiment of the present invention, as illustrated in Figure 1C, each of buttons **51-56** resembles an element or is an outline of an element.

20   In one of additional embodiments of the invention, as illustrated in Figure 1D, images **51a-56a** of element or similar representations thereof are disposed next to buttons **51-56**.

Preferably, buttons **51-56** are electrically connected to a built-in processor that in turn controls a radio frequency generator contained within control panel **10**. However, many alternative arrangements will be evident to one skilled in the art.

5   A game organizer, typically an adult, prepares the game by hiding elements **31-36** in a room. Subsequently, the player (typically a child) chooses, by way of example, button **54**, which is associated with cow image **54a** on control panel **10**. When the player presses on button **54**, corresponding element **34** is activated. A signal **100** is sent to element **34** to

10   produce a sound **102**, in this case, a mooing sound made by a cow. It must be emphasized that the initial viewing of cow image **54a**, juxtaposed to the activation of mooing sound **102**, provides the player with a strong associative connection between mooing sound **102** and cow image **54a**, and more broadly, to real cows. This connection is reinforced each time button **54** is

15   pressed, as the player hears mooing sound **102** again and again, each time associating mooing sound **102** with cow image **54a**, which is concretely displayed on control panel **10**. Thus, the cognitive and associative skills of the player are strengthened.

Identifying sound **102** as being a mooing sound made by a cow makes the

20   finding of toy cow element **34** easier and more enjoyable. Moreover, once toy cow element **34** is found, an additional association, this time between toy cow element **34** and mooing sound **102**, serves to further reinforce the associative learning of the player.

In a preferred embodiment, the game organizer can control some or all of the buttons on control panel **10**. This introduces numerous game possibilities. For example, before the player has found the designated hidden object, it is possible to further stimulate the player and simultaneously challenge the player to develop object-concept associative skills, by selecting another set of characteristics of buttons **51-56**. The characteristics can also be a description of the elements, names of the element, or a set of spelling and other type of description of the elements. Alternatively, the associative sounds emitted by elements **31-36** can be spelling of the names of the elements, a set of verbal hints that hint to the nature of the elements, names of the shapes of the elements, or passages of songs associated with the elements.

Optionally, upon finding the cow, the child can be informed of the outcome of the game by optional buttons and circuitry correspondingly programmed and provided on the control panel.

The capability of control panel **10** to store digital data (e.g., in a memory **24** that is operatively connected to a microprocessor **26** disposed within the panel, as shown in Figure 1D) allows the game of the present invention to be adapted to a wide variety of audio as well as video media, thereby expanding the entertaining and educational features of the game.

As an additional feature, memory **24** can be used for storing a data library of common objects and sound information associated therewith.

In additional embodiments of the present invention, illustrated in Figure 2, letters **72**, numbers **74**, shapes **76**, and colors **78**, and names of objects **80**

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can serve as the associative figures **51a-56a** appearing on control panel **10**. In the embodiment using letters **72**, elements **31-36** would be letters, or objects associated with each letter, e.g., an apple figure for "A". Similarly, in the embodiment using numbers **74**, elements **31-36** would be numbers, or objects associated with each number. In the embodiment using shapes **76**, elements **31-36** would be shapes, or objects associated with each shape, e.g., a hockey puck for a circle figure. In the embodiment using colors **78**, elements **31-36** would be colors, or objects associated with each color, e.g., a red car for associating with the color red. In the embodiment using names of objects **80**, elements **31-36** would be the objects associated with each name, e.g., a teddy bear for associating with bear **52a** on control panel **10**.

The plethora of options for implementing the game of the present invention allow the game to be adapted to a wide range of playing abilities, and also ensure that the game will be entertaining.

Although the invention has been described in conjunction with specific embodiments thereof, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, it is intended to embrace all such alternatives, modifications and variations that fall within the spirit and broad scope of the appended claims. All publications, patents and patent applications mentioned in this specification are herein incorporated in their entirety by reference into the specification, to the same extent as if each individual publication, patent or patent application was specifically and individually indicated to be incorporated herein by reference.

In addition, no citation or identification of any reference in this application shall be construed as an admission that such reference is available as prior art to the present invention.